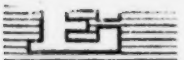
UNITED NATIONS

ECONOMIC AND SOCIAL COUNCIL



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Third Session of the Joint Conference
of African Planners, Statisticians
Demographers

Addis Ababa, 5-14 March 1974

UNION FOR AFRICAN POPULATION STUDIES

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UNION FOR AFRICAN POPULATION STUDIES

As a result of informal discussions at the second session of the Joint Conference of African Planners, Statisticians and Demographers, held in Addis Ababa 8-17 March 1962, a small committee was set up to examine the question of setting up a viable association devoted to the scientific study of African population. The report of the committee and the constitution prepared by it is attached as Annexes I and II.

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Annex I

The report of the Ad Hoc Committee

HISTORICAL INTRODUCTION

1. The need for an association devoted to the scientific study of African population has long been felt in the region. Attempts to set up such an association towards the end of the 1960s did not prove successful. However, during 10-14 May 1974 the Population Association of Africa (PAOFA) was inaugurated at, Ibadan, Nigeria. The inaugural meeting formed part of what was a very successful scientific meeting. PAOFA also set up an editorial board for the publication of "Similar Matters" (Journal of Population Studies in Africa) the first issue of which appeared in February 1976. However, the bleak hopes that many African demographers and all other social scientists interested in the study of population had of the PAOFA was short-lived and the association's activities died down. At the IUSSP conference in Mexico and at the third conference of African Demographers in Dakar in 1979 attempts were made to revitalize the association. Unfortunately these were not successful and interest in PAOFA therefore waned out. At the second session of the Joint Conference of African Planners, Statisticians and Demographers convened in Addis Ababa, 9-17 March 1982, an attempt was made by a few concerned demographers to add the topic to the agenda for the Conference but were dissuaded by the secretariat with the promise that the whole question will be examined informally and a report submitted to the third session of Conference of African Planners, Statisticians and Demographers.

2. An informal committee therefore was set up within the secretariat consisting of Mr. V. Azefor of the Population Division and Mr. K.T. de Graft-Johnson of the Statistics Division to look at ways and means of setting up a viable association devoted to the scientific study of African population. The committee met several times, drew up a programme of work and prepared a draft constitution. Prior to this enrolment forms had been despatched to prospective members. More than 300 of them completed this form. The constitution, in English and French, was despatched to each member of the new association for comments. These comments have been received and have been taken into account in revising the constitution.

CONSTITUTION

3. The draft constitution which was circulated elicited a number of responses. Some of these dealt with:

(a) Name of the Union

(b) Vice-President who is also the President-elect

(c) Membership

(d) Officers of the union

(e) Location of the Headquarters and the secretariat

(a) Name of the Union

4. The name originally proposed for the Association was the African Union for Population Studies. It has however been pointed out that as members of the Union will be those who deal with African population studies and not necessarily those who reside in Africa, the name should be changed to the Union for African Population Studies. This will reflect the fact that it will be a union of researchers on the African population problems and not, as the previous name implied, a union of African scientists doing research in general population problems. The committee has accepted this recommendation and has changed the name to Union for African Population Studies, (UAPS).

(b) Vice-President as President-elect

5. It was also suggested that there was no point in making the Vice-President the President-elect and that instead the Vice-President should be elected to serve for a period of two years and be eligible to stand with others for election for the post of President when the latter's term of office expires. The committee examined this proposal but it disagreed with it on the following grounds. The post of Vice-President (or President-elect) has been put down to ensure continuity in the work programme of the Union. If a completely new council takes over the Union there is always the danger that it will be unaware of why certain decisions were taken and in its ignorance it may start new initiatives which may prove damaging to the interests of the Union. It should also be noted that it is now conventional for most international associations like the International Union for Scientific Study of Population (IUSSP) the Population Association of America (PAA) and the International Statistical Institute (ISI) to have an office of President-elect. This has proved very useful and the committee thinks that the Union for African Population Studies can learn from the experience of other international organizations.

(c) Membership

6. A change had been proposed in Article 10 (b) as follows. "The Council may for good and serious reasons and by a two-thirds majority provisionally recommend a member for suspension from the privileges of membership to the General Assembly. The General Assembly shall, also by a two-third majority, withhold or reverse such a suspension as appropriate AFTER considering the member's oral and/or written defence. In matters of suspension or reversal of suspension of any member, the decision of the General Assembly shall be final." This text differs from the original proposed by the committee, it was considered to present the original version to the Joint Conference because the proposed revision was no improvement on the content and purpose of article 10(6).

(d) Officer of the Union

7. Additional officers of the Union had been proposed. These include an assistant Secretary-General, Editor of the Journal and an Auditor. The committee does not see why an Assistant Secretary General should be appointed and therefore has not accepted this recommendation. It has however made provision for the Editor of the Journal to be an officer of the Union because the Journal is expected to be the principal tool for disseminating the scientific studies of members. It should however be noted that auditors are independent and are never included in

any Council. They are expected to carry out their duties independent of the Council and their reports are submitted in their individual capacities to the General Assembly. It will thus not be advisable to include an auditor on the council who will in turn have to audit expenditures approved by the Council of which he was a member. Provisions have however been made in the constitution for the appointment of an auditor.

(e) Location of the headquarters

7. The constitution has made provision for the temporary location of the headquarters in ECA, Addis Ababa. It is hoped that at a later date an institution, i.e. a national statistical office, a demographic research centre or a university or similar organization would accommodate the invite of the Union to establish its headquarters in premises provided by the institution and would also provide a small subvention towards the upkeep of the secretariat. It is usual for the seat of the Union to be also the location of the secretariat. A question has been asked as how a Secretary-General who is resident in Ghana or Nigeria or Kenya can operate with a secretariat in Addis Ababa. It should be pointed out that when the secretariat becomes fully operational, it will have its own full time Executive Secretary and the Secretary General of the Union will provide guidelines to the secretariat by correspondence and telephone calls. It will be inadvisable to move the secretariat to the place of residence of the Secretary-General every time a new Secretary-General is appointed. This procedure has been adopted by other scientific unions for example, the current Secretary General and Treasurer of IUSSP, is based in Paris, the previous one was based at Florence, Italy whereas the Secretariat is in Liege, Belgium. Of course the presence of the Secretary General in a location which is close to the secretariat is an asset. It is for this reasons that for the initial phase of the operations of the Union it has been proposed that one of the candidates for Secretary-General should be resident in Addis Ababa.

PUBLICATION OF JOURNAL

8. As already implied the publication of a scientific journal in which the results of studies and researches are published is one of the important objectives of the Union. It is for this reason that the committee has agreed that the Editor of the Journal should be included in the list of officers of the Union. The members of the Editorial committee have however not been included in the constitution because the selection is a function of the Council in consultation with the Editor-in-chief. However, in the absence of a Council at this time and in order to start work on the journal, the committee has recommended the following:

Editorial Board

Editor-in-chief	A. Adepoju (Nigeria)
Associate Editors:	A. Farrag (Egypt)
	Sala-Diakanda, Mpembele (Zaire)
	D. Lantum (Cameroon)
	G.M.K. Knedekpo (Ghana)
	Julien Conde (Guinea/France)

PAYMENT OF SUBSCRIPTIONS

10. The committee examined the current economic situation in African countries, foreign exchange restrictions which are maintained in most of them and the effects of these on the payment of subscriptions. It also examined proposals which have been made for solving these problems in other international organizations. These proposals have included the use of UNESCO coupons in those countries where members may have no ready access to foreign exchange or international money order facilities. It was however pointed out that although the possibility exists for the use of UNESCO coupons, most Africans have found it difficult to make use of it for payment of subscriptions to international organizations and that this difficulty will be encountered by the members of the association. Another approach was to designate certain zones, say in the ECOWAS countries, where payment could be made in one currency and kept in a national "sub-regional" office of the association so that when the amount reaches a certain level it can be used for an activity within the sub-region. This has been tried with Eastern European countries but it has not been very successful.

OFFICERS AND MEMBERS OF THE COUNCIL

11. As part of the transitional arrangements for the operation of the Union, the committee acting as a Nominations Committee is recommending the following for the elections. It may be noted that for each post two candidates are proposed. The Joint Conference may wish to modify this list of candidates but it should be remembered that under the constitution members have the right to nominate other candidates. The list proposed by the committee is as follows:

President:	El Badry (Egypt)	K.T. de Graft Johnson (Ghana)
Vice-President:	S.P. Coulibaly (Upper Volta)	Mpti (Lesotho)
The Secretary-General	M.A. Azefor (Cameroon)	
Treasurer	O. Ayeni (Nigeria)	
Editor-in-Chief	A. Adepoju (Nigeria)	Sala Diakenda (Zaire)
Council members:		
North	Mongi Bchir (Tunisia)	Negadi Gourari (Algeria)
West	C. Okoye	Abdoukarim Diop (Senegal)
Central	Mme Njeck (Cameroon)	Mfonlou Rephael (Congo)
Southern	C.M. Mandishona (Zimbabwe)	
East	Abdulahi Hassen (Ethiopia)	Bruno Disaine (Madagascar)

CONCLUSION

12. The committee has suggested that the Union for African Population Studies become operational with effect from 15 March 1984. The list of officers will be circulated to all members who have filled in their enrolment forms to enable them to propose other candidates in accordance with the consititution. After a full list has been received ballot papers will be sent to all members so that the officers and members of Council can be elected. It should be noted that for this first election the qualification for members eligible to vote, namely members in good standing will be waived and those who completed the prospective enrolment forms will be considered eligible to vote.

Draft Constitution of the Union for African Population Studies (UAPS)

Article 1

Purposes and composition

The Union for African Population Studies (UAPS) (hereinafter referred to as the Union) is an association of individual members, having as its aim the furtherance of the scientific study of population in Africa.

Article 2

Objectives:

(a) The Union shall foster collaboration among persons engaged in the study of demography in all African countries.

(b) The Union shall stimulate interest in population matters among governments, national and international organisations, scientific bodies and the general public in African countries;

(c) The Union shall organize conferences and publish scientific information dealing with population matters.

Article 3

Headquarters

The Union's headquarters shall be provisionally located within the Secretariat of the Economic Commission for Africa and its temporary secretariat duties will be the joint responsibility of the Population and Statistics Divisions. The Union's headquarters may be transferred by a majority decision of the General Assembly or by postal ballot of all registered members to another city in an African country.

The activities, assets and liabilities of the Union shall be separate from those of the office or organisation in which its headquarters is located.

Article 4

Membership

The Union shall be composed of ordinary, honorary and institutional members whose applications shall be accepted according to rules laid down in Article 10.

Ordinary members

Ordinary members elected in the manner laid down in Article 10 below shall be persons who have made contributions to the scientific study of population by their researches, writing, teaching or otherwise.

Institutional members

The Union may grant institutional membership to national and international organizations involved in population related work in Africa. The Council of the Union shall submit the applications of such bodies to the General Assembly of the Union for approval.

Article 5

General Assembly

A meeting of registered members of the Union shall be convened every two years in the manner laid down in Article 11. Members of the Union attending such a meeting shall constitute a General Assembly. Should circumstances make it impossible to convene a General Assembly within two years of the previous assembly, proposals which would otherwise have been submitted to the General Assembly will be submitted for a postal ballot. A General Assembly shall be convened as soon as may be practicable thereafter.

Article 6

Officers and Council

1. The officers of the Union shall be a President, a Vice-President, a Secretary General, a Treasurer and Editor-in-chief of the Union's Journal.

2. Members who have held office as President may be elected Honorary President of the Union and remain such whilst they remain members of the Union;

3. The Council of the Union shall consist of the officers and five other elected members taking into account as far as possible geographical distribution. Honorary Presidents shall be members of Council in a consultative capacity.

Article 7

Period of Office

1. The officers and council shall be elected by registered members in the manner described in Article 12.

2. The President shall serve for a period of 2 years and shall not be re-eligibl for any office.

3. The Vice-President shall be elected to serve for a period of two years and shall succeed to the office of President when the latter's term of office expires.

4. The Secretary-General, Treasurer and Editor-in-chief shall be elected to serve for a period not exceeding two years and shall be eligible for re-election.

5. Members of Council shall serve for a period of two years and shall be eligible for re-election for one further term only. They may thereafter be allowed to run for the office of Secretary-General, Treasurer or Vice-President.

6. Casual vacancies through death, resignation or otherwise shall be filled in the following manner:

(i) A vacancy in the office of President shall be filled by the Vice-President. Provided that he does not serve more than half the former President's term, he shall be allowed to serve a further term;

(ii) A vacancy in the office of the Vice-President shall not be filled until the election of officers during the next General Assembly;

(iii) Vacancies in both offices of President and Vice President shall be filled by the member of Council who is most senior in length of membership of the Union until the election of officers during the next General Assembly;

(iv) A vacancy in the office of Secretary General and Treasurer shall be filled by an appointment of a member of Union by the Council until the next election of officers;

(v) A vacancy in the office of Editor-in-chief shall be filled by appointment of one of the Associate editors;

(vi) A casual vacancy on the Council may be filled by co-option. A co-opted member shall serve until the next following election of Council members and shall be eligible for election as Council member.

Article 8

Powers of Council and Officers:

1. The Council shall administer the affairs of the Union and organise its scientific activities, subject to the directives of the General Assembly.

2. The President may in case of urgency act on behalf of the Council, but shall report his actions to the Council immediately. Should the President be prevented by reason of disability or otherwise from acting, his powers shall devolve on the Vice President during such period of disability.

3. The Secretary-General shall keep minutes of the General Assembly and of the Council. He shall assist the President in carrying out the decisions of the Council and the General Assembly. He shall prepare reports on the activities of the Union.

4. The Treasurer shall keep the accounts of the finances of the Union. He shall prepare financial reports to the General Assembly on the finances of the Union since the last General Assembly.

5. The President, the Secretary General and Treasurer shall be ex-officio members of all administrative committees appointed by the Council or the General Assembly except the Committee on Nominations.

Article 9

Voting rights

1. All members of the Union shall have equal voting rights.

2. Votes at a General Assembly may, in the first instance, be taken by a show of hands. Any five members may demand after the results have been announced that a ballot be taken.

3. The Council may use postal ballots to obtain the Union's decision on specific issues.

4. When postal ballots are used, the Council will be required to mail ballots six weeks before the final date of return of ballots. The results of such ballots shall be communicated by mail to all Union members.

Article 10

Election and suspension of members

1. Election of new members shall take place in each calendar year, unless the Council shall otherwise determine.

2. A candidate for election to membership of the Union shall be proposed and seconded by two members of the Union. The proposer shall submit a statement of 100-200 words in length, giving reasons for supporting the candidate.

3. Nomination forms shall be submitted to the Secretary General by 31 January each year. They shall contain a statement of the candidate's present position, his principal past positions and of his scientific publications.

4. All nominations for membership shall be presented to the Council, which shall either approve or reject them. Candidates whose nominations are approved by the Council become members as from 1 January of the year of election. Candidates whose nominations are rejected shall be notified and the reasons for rejection given.

5. All candidates elected to membership of the Union shall become registered members upon payment of annual membership dues.

6. The Council may for good and serious reasons and by a two-thirds majority suspend a member from the privileges of membership. Such suspension shall become effective immediately but shall be reported to the next General Assembly. The suspended member shall have the right to address the Assembly either in person or by correspondence. The General Assembly shall uphold or reverse the action of the Council and its decision shall be final.

Article 11

Meetings of the General Assembly

1. Meetings of the General Assembly shall be convened on the authority of the Council at intervals laid down in Article 5.

2. The Secretary General shall give notice in writing to each member of the Union at his registered address of the date and place of the next General Assembly not less than four calendar months before the beginning date.

3. The accidental omission of notification under Article 11, section 2 shall not invalidate the actions of the Assembly.

Article 12

Election of officers and council

1. The following procedure shall govern the frequency of elections:

(a) Election of officers and Council shall take place during the General Assembly of the Union

(b) If no General Assembly takes place within two years and Council anticipates further delay in convening a General Assembly, elections shall be conducted by postal ballot under the same conditions laid down in Article 9, section 4.

2. At each General Assembly there shall be elected a Committee on Nominations consisting of five members of the Union all belonging to different countries. The Committee shall choose its own chairman and the Secretary General shall act as its Secretary. Individual union members may make recommendations on nominations, in writing to the Committee.

3. Alternative nominations may be submitted to the General Assembly by any five members of the Union six hours before the Assembly meets.

4. If ballot is by post the Chairman of the Nomination Committee shall consult the members of his Committee by post.

5. Persons receiving the largest number of voting rights shall be declared elected. In the case of an equality of votes the President shall have a casting vote in addition to his own vote.

Article 13

Finance

1. The financial affairs of the Union shall be adminstered by the Treasurer who shall work in close collaboration with the President and Secretary General and under the general direction of the Council. The President shall authorize all expenditure.

2. Members of the Union shall pay annual dues except they are excused by a resolution of the General Assembly.

3. The amount of annual dues shall be determined by the General Assembly on the advice of the Council.

4. Members who fail to pay dues for two consecutive years and are not excused from paying shall be considered as having resigned. Such members may be reinstated by a resolution of Council upon payment of outstanding dues.

5. The Council shall be empowered, if necessary, to charge a registration fee to members attending a conference organized by the Union.

6. The Union may accept donations, gifts or subsidies negotiated by the Council

7. The General Assembly shall appoint auditors, who shall examine the books, vouchers and accounts of the Union and determine whether they have been properly kept. This report shall be submitted to the General Assembly through the Secretary General.

Article 14

Committee of the Union

1. The Council or General Assembly shall appoint committees to deal with intern matters concerning the Union or its external relations.

2. The Council or the General Assembly may also appoint committees to study specific problems in the field of demography.

3. All Union committees shall take office immediately upon appointment.

4. The chairman of each committee shall make a report on the Committee's work to each General Assembly.

5. The General Assembly may extend the mandate of a committee or revise its terms of reference after receiving the committee's report.

Article 15

Meetings and conferences of the Union

1. The Council shall arrange scientific meetings on specific subjects dealing with African demography.

2. Meetings organised by the Union shall be open to all members of the Union. Other persons may be invited or upon their request, permitted to participate on conditions laid down by the Council.

3. The Council may appoint an organising committee for each conference and may delegate powers to such committee.

4. The Council may make rules governing the preparation and presentation of communications to conferences by members. Such rules shall regulate the selection of papers for each conference.

5. The Council shall circulate submitted contributions selected for each conference to all persons attending the conference. It shall not be under any obligation to publish submitted papers.

Article 16

Publications

1. The Union shall publish the proceedings of General Assemblies, the statutes and a current list of members.

2. The Union shall publish as a regular publication a Journal on African Demography.

3. The Union shall also publish or collaborate with other organisations in the publication of matters appropriate to the objectives set out in Article 2. Such publications shall be regarded as special publications.

4. Members of the Union who have paid the appropriate dues shall receive all regular publications of the Union. The Council shall decide conditions under which special publications shall be made available to members.

Article 18

Amendments

1. Any proposals for amendment of these statutes may be submitted in writing by not less than five members belonging to at least three different countries.

2. Proposals for amendment shall be circulated to members at least 90 days before the date fixed for the General Assembly.

3. The General Assembly shall appoint a committee of five members to examine and modify proposed amendments for submission to the General Assembly.

4. The General Assembly shall vote on the amendment and it shall be approved if at least two thirds of the members present and voting favour the amendment.

5. After approval by the General Assembly the amendment shall be submitted to all members by postal ballot. The Secretary General shall invite members to return ballot forms within a period of six weeks. The amendment shall become operative if a majority of votes have been cast in its favour.

Article 19

The working languages of the Union shall be English and French.

Article 20

Dissolution

1. The Union may be dissolved by a two-thirds majority vote of the General Assembly or by a postal ballot for reasons of expediency.

2. In that event, the property, funds and records of the Union shall be assigned to any other continental scientific organisation involved in population work in Africa. Such assignment must be made within three months following dissolution of the Union.

Article 21

Transitional provisions

The officers and council in office at the time of the ratification of this constitution shall be deemed to have been elected in accordance with the provisions of this constitution.

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THE ORGANIZATION OF BIBLIOGRAPHIC WORK IN AFRICA

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1. Bibliographic work entails the recording and description of publications:- books, periodicals, and magazine articles, newspapers etc. that relate to a given subject or group of subjects. It could also pertain to a country, sub-region or continent. Bibliographies can be compiled by individuals acting on their own or under the auspices of a library or documentation centre. Professional organizations can also organize bibliographic control of certain subject in order to facilitate the work of research workers and others who may wish to gain ready access to the literature of their fields of interest. Governments also encourage and sometimes actively sponsor bibliographic work. Commerical organizations, especially publishing firms participate in bibliographic activities especially with regard to publication of current abstracts and indexes. As a matter of fact, the cataloguing and classification of books acquired in a library or documentation centre is bibliographic work. Furthermore, the collection, analysis and indexing of publications by mechanical processes constitute a bibliographic activity.

2. The various individuals and organizations named above which engage in bibliographic activities produce different types of bibliographies. Research workers whether in the humanities, the social sciences or the pure sciences need a ready tool for checking what new or current work has been done or is being done in their fields of interest. Such a need is admirably met by the regular publication of indexes and abstracts on various subject e.g. Biological Abstract, Index Medicus, Economic Abstracts etc. Retrospective bibliographies list works that have been published in the past with respect to a given geographical area and covering all subjects or most subjects or single or limited groups of subjects e.g. Bibliography of Sierra Leone by Luke, Bibliography of the Gold Coast by Cardinal, Bibliography of Development Planning by Akinyotu etc. By means of a national bibliography it is possible to have information about the number of books published in a country, regardless of whether they refer specifically to the country or not as well as on the distribution of such publications by subject e.g. British National Bibliography, Nigerian Publications. A cursory look at the literature of bibliographic work pertaining to Africa reveals as follows:

a) that some bibliographic activities are carried out in African countries particularly with respect to retrospective bibliographies;

b) that a few countries do publish national bibliographies;

c) that the bulk of current bibliographic work on Africa is done outside the continent in research centres of Europe and America:- the activities of the Library of Congress, Centre d'Analyse et de Recherche Documentaires pour l'Afrique Noire (CARDAN), Centre de Documentation Economique et Sociale Africaine (CEDESA), Standing Conference on Library Material on Africa (SCOLMA), to name a few, attest to the situation. The few efforts made in Africa include African Notes published by the University of Ibadan and Bulletin bibliographiques of Archives du Senegal;

d) that the activities of some international information networks do cover Africa although in certain instances the input from the continent is rather low e.g. FAO/AGRIS, the African component of which is to constitute PADIS/AGRIS.

3. From the foregoing, it could be seen that the state of bibliographic work in Africa is hardly satisfactory and the following urgent steps must be taken to correct the situations:-

ACTION TO IMPROVE THE SITUATION

Encouragement of more indigenous publishing

4. At present over ninety per cent of serious publications used for research and education purposes is published outside the continent. That is partly the explanation for the fact that the bibliographic control of the relevant publications is principally done abroad most especially by the indexing and abstracting services. In order therefore to redress the imbalance it will be necessary for African countries to encourage more indigenous publishing. Some attempts are already being made in this connection like for example the establishment of the East African Publishing House. Furthermore, as has been observed elsewhere during the current Conference the results and findings of scientific research undertaken in African countries are published in overses learned journals. Consequently a large number of African scientists sometimes do not get to know of such work, a situation that can lead to duplication of effort. It will therefore also be beneficial if African governments can give financial assistance and encouragement to learned journals published in their countries, a good number of which are facing serious difficulties.

Publication of National Bibliographies

5. According to a 1967 survey, only the following seven African countries are reported to be publishing national bibliographies:- Ethiopia, Madagascar, Malawi, Nigeria, Rhodesia, Senegal, Sierra Leone, if we exclude South Africa. University libraries in Kenya, Tanzania, Uganda and Zambia, include in their lists of accessions publications of their respective countries. The result of this general lack of national bibliographies is that research workers and others have no information concerning both trade and government publications that emanate from most African countries. In fact, it may not be far fetched to observe that this partly accounts for the absence of data and information which led the Conference of Ministers of ECA countries to call, for instance, for the establishment of PADIS. If African countries that are not ready doing so take appropriate steps to get their national bibliographies published, one basic step towards filling the gap would have been taken. In order however to facilitate the

publication of a national bibliography it is necessary as has been mentioned in another paper to enact a deposit law whereby either authors, printers or publishers of books are required to deposit a stipulated number of their publications in a designated library. A listing of the materials will constitute the national bibliography.

Establishment of National Information and Documentation Centres

6. Publishing a national bibliography listing books, pamphlets etc. that have been put out in a given country does not necessarily ensure the full coverage of all data and information relating to the overall development of the country. There are for example, research reports, surveys, studies etc. which do not qualify for inclusion in a national bibliography because they are not by definition publications. There are also periodical articles which are the results of research activities going on in different laboratories in the country. In order therefore to ensure the bibliographic control of the above forms of material it is necessary to establish national information and documentation centres which will undertake the collection, analysis and indexing of published and unpublished material emanating from the country. PADIS is already, as has been mentioned elsewhere, working towards getting African countries to establish national and information centres.

The role of PADIS in the Co-ordination of bibliographic work in Africa

7. The objectives of PADIS have already been described in another paper at this Conference. It is however pertinent to observe that PADIS is playing the role of a co-ordinating agency for bibliographic work on the African continent through its network of national and sub-regional centres. As a matter of fact, PADIS is implementing the following resolution which was passed as long ago as 1967 at the Nairobi Conference of African Bibliography:

> "That an international network for the co-ordination of bibliographic data on Africa should be established. That a documentation centre provided with key - punching and computer equipment should be set up as soon as possible at a suitable location in Africa to form a link between (a) national and regional centres in Africa and (b) centres in other countries".

8. Furthermore, when PADIS/NET will be established it will be possible to have quick exchange of bibliographic information between one African country and another. As a matter of fact, PADIS has facilities to provide SDI (Selective Dissemination of Information) and other bibliographic services for those who require it.

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ORGANIZATION AND MANAGEMENT OF EDP INSTALLATIONS

Most people, when they hear talk about computation or data processing centres are either intrigued or scared by the mystery surrounding the fact that non-living things can become as smart as (if not smarter than) living things to the point of rivalling the human mind. The mystery is kept alive by data processing people who continue to practice their profession like magic, using abracadabra beyond the ken of ordinary mortals, making people forget that the computer, like any other machine, was created by the human mind.

Far from inspiring fear, the computer (together with all the paraphernalia which go to make it a computation centre) should be seen as a mere device that humankind has invented to make life easier and be admired as such. Computation centres make life easier only when their installation, organization, equipment and management have been properly mastered. The greatest thing about computation centres is not who heads them but the person, most often a novice, who is entrusted with establishing centre.

First and foremost, the genuine needs of users will have to be identified and classified in a defined order of priority that best serves their interests. The criteria for setting up a computer centre to meet overall national needs, the technical needs of a ministry or simply to provide technical backstopping for a population census, are not the same. In selecting equipment, much depends on the nature of needs to be satisfied, their urgency and the priority accorded to them. Such needs should not be identified in some so-called feasibility study but should be based on a detailed, meticulous and accurate assessment of what needs to be done, how it is to be done and why it is being done.

Once the needs have been defined, the next thing is to make a comprehensive list of equipment available on the market that could possibly satisfy the needs. The list should be as comprehensive as possible, covering all geographical areas where equipment is manufactured and taking into account political spheres of influence and the economic interest areas of monetary zones. While the United States of America is a clear leader in terms of quantity and quality of equipment produced, the United Kingdom, France, the Federal Republic of Germany, Italy and Japan have equipment which, though not as competitive in all respects, can meet specific needs at prices which are reasonable when the political, economic and monetary climate is considered. The list should reflect the pervading and overwhelming presence of major data-processing equipment producers but should not overlook the fact that they are not necessarily the sole producers and their equipment not necessarily the best or the least expensive. Some virtually unknown brands are being marketed by small manufactures (who have for diverse reasons broken away from the big manufacturers) at prices ranging from 200 to 300 per cent less than the major brands.

While taking the ident ified needs into account, the comprehensive list should lead to a recommendation of three machines generally. These three should have been chosen on the basis of three different criteria: the brand name, the geopolitical, economic and financial sphere of influence and the technical performance of the machine. From these three criteria, a single final selection will be made on the basis of the user's concerns, preoccupations and means. Naturally prices to be paid by the clients, delivery schedules, component parts and maintenance form other important criteria that, unfortunately, are not always taken into account and often lead to misunderstandings and failures.

Once the equipment has been selected, the site must be prepared. Buildings should be built or refurbished to house the computation centre. In this case, it is better to be well prepared than ill-prepared. Spacious, high-ceilinged, well ventilated and conditioned rooms are always better than modern rooms that feel crowded. Any claims by salesmen or promoters that air-conditioning is not necessary should be discounted. Weather changes during the day from day to day and from season to season and good air-conditioning should be preferred to frequent repairs. A computation centre is always considered to have too much space at the beginning but then extensions are soon made to the equipment and if too many allied pieces of it are concentrated in one place, the temperature will rise in accordance with the number of equipment pieces being used at a time. When all the components are operating at full power in hot weather, good air-conditioning helps to keep the temperature even and constant.

Without adequate staff, the quality of machines and proper preparation of the site would amount to nothing. The first category of staff whom users never think about is that of hardware engineers. These are electronic engineers trained to install, maintain equipment and make it last. They must have proper tools and component parts. To date computer sellers have been providing such engineers but increasing, users (in particular small African users) should recruit their own maintenance engineers if they want their computation centre to keep functioning. The second category of staff is that of data processors. Chief among them is the head of the centre. His selection should be conducted with seriousness and without favouritism, He should be competent, qualified and especailly discreet. A head of centre who has too many things to explain is often a bad leader. To identify a good head of centre, the person should be placed before a switched-off computer.. If he manages to switch it on, load the software and to operate the computer, he is good to begin with and a little additional training on the job which he can give himself will enable him to adapt to the specific needs of the centre.

He should be assisted by a deputy, one or more programm analysts who are well acquainted with the problems involved and some programmers. The operators and tape library manager can be trained very quickly on the job by the head of centre.

When all the foregoing conditions have been fulfilled the centre is ready though not operational. Developing and acquiring software are the most exiting aspect of work at a computation centre. The computer must be made to speak and work. It needs a language, a methodology and logic based on its own internal structure. Such software and programmes take a long time to develop and are very expensive to buy. The selection of equipment is sometimes greatly influenced by the availability, performance and cost of the required software. Software should be acquired prudently and rationally in order to avoid wasting resources and buying wrong. It is not their quantity which counts so much as the quality of service that can be obtained from them.

Organizing and managing computer centres appears to be a very simple and yet complex operation. It becomes simple if all the criteria involved are rational. It becomes complex if trial and error and irrational approaches are used. Whatever the circumstances, no system is proof against monumental errors that should humbly be admitted and corrected as soon as possible. Establishing and managing a computer centre is still a great mystery. However it is now part of computer wizardry. All one needs to understand it is to be initiated as a wizard.

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TRANSFER OF INFORMATION TECHNOLOGIES IN AFRICA

TRANSFER OF INFORMATION TECHNOLOGIES IN AFRICA

These days everything has some technology, logical structure, rational methodology or systematic approach. Development information and documentation also have some technology that has been produced by the research efforts of private and public agencies, countries and organizations.

For several years, Member States of the United Nations have felt the need to define norms that could be used by various research groups to work in a standardized manner that would enable them to be compatible with each other while retaining their distinctive personalities. UNESCO was given the mandate to define such international standards formulated in the course of various UNISIST meetings. The standards are general guidelines that most countries and organizations have adopted to their specific needs. Using UNISIST principles, FAO has created the documentation system called AGRIS for agricultural documentation needs. The Dag Hammarksjold Library in New York, on its part, has developed the UNBIS system which for lack of effective support in the field the otherwise numerous United Nations Offices and Information Centres have yet to succeed in getting other bodies to accept or adopt.

The Canadian International Research and Development Centre (IDRC) has developed its own documentation system which mainly uses documents produced by the United Nations family. The system, DEVSIS, has also encountered enormous difficulties getting accepted not for lack of quality but for a lack of enthusiasm on the part of users and of support in the field.

The problem of Africa has been the impossible choice it has to make. More than three-quarters of the African people live in rural areas. FAO has been very ingenious in using national, individual correspondents to succeed in effectively establishing the AGRIS system. The UNBIS system has been a total failure in Africa and on other continents. After several years, the DEVSIS system has found its feet and gained a following in Latin America, Europe, Asia and Africa.

The tragedy is that in terms of documentation technology, Africa is somewhat been blackmailed into adopting one of the technologies before it will be given money.

By creating the Pan-African Documentation and Information System (PADIS), Africa is building up a synthesis. Indeed, a detailed study of the three systems provided two things:

(a) The UNBIS System does not follow the UNISIST recommendations as proposed by UNESCO. Adopting it would throw Africa into complete isolation. For that matter, no African countries or organizations use it.

(b) The well-established AGRIS System and the up-and-coming DEVSIS system are based on two different kinds of documents (agricultural documents and official reports of international organizations). They both follow UNISIST principles while retaining their respective features.

The work of PADIS has been to make things easy for African documentalists by bringing the AGRIS and DEVSIS Systems into a compatible relationship with each other.

Africa's documentation technology as developed by PADIS enables any documentalists to use a single indexation manual and a single entry slip for any type of documents for no matter what organization the final product is intended. The PADIS manual and entry slip enable AGRIS and DEVSIS to be integrated and keep Africa above the fray of the various schools of thought which would only make Africa stagnate. While documentation technology has been developed for conventional and non-conventional documents, it might be asked what has been done for statistical series and numerical, technological, mineral, cartographic and other data. The answer is nothing, or more precisely, a surfeit of poor quality information. Involved in the rat race are numerous schools, innumerable data bases, and myriad technologies. For statistical series, PADIS has with the assistance of the French Government and under the aegis of the Statistics Division's PADIS-STAT Project, developed a technology which will begin to be tested in the very near future. We are still groping our way with regard to other non-documentary data.

Within the next five years, we expect to initiate various technologies that would bring about the pooling of all this information for use by all parties concerned with the development of Africa.

While some trials are being conducted, they are still too insignificant and have yielded no results worth mentioning.

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REPORT ON THE ACTIVITIES OF PADIS (1982-1983) AND PROGRAMME OF WORK FOR 1984-1987, WITH PROJECTIONS UP TO 1989

I

REPORT ON PADIS AND EXAMINATION OF WORK PROGRAMME (1984-1989) WITH PROJECTIONS UPTO 1989: SUMMARY

A. REPORT

I. ACTIVITIES OF THE CENTRAL COORDINATION OFFICE (CCO)

1. The establishment of the CCO is by far the most remarkable achievement of the PADIS programme. The operations of the substantive sections have unmistakably demonstrated the technical soundness of the PADIS programme. While the coordination work that has been started with the inauguration of PADIS has just started to bear fruit as the national centres in Benin and the Sudan prepare to start operation.

2. Five issues of DEVINDEX-AFRICA, a retrospective index to development litrature on Africa, have been prepared published and circulated by August, 1983. By December, 1983 twelve issues will have been prepared, eight of them under circulation.

3. At the time of the writing of this report the first volume of the Directory of African Experts containing 3,500 references was prepared and under print. By March 1984 the preliminary phase of the "Pan-African Referral Information System for Technical Cooperation Among African Countries" project will have been completed and the second volume of the Directory of African Experts published and released.

4. Two international data bases, LABORDOC and UNDIESA, have been acquired and are available for retrospective searches at the PADIS/CCO.

5. Technical assistance has been provided to ECA Population and Trade Divisions for the design of the Population Information Network for Africa (POPIN-Africa) and the Trade and Finance Information System for Africa (TF-Africa), respectively.

6. Technical and material support was provided to the ECA Statistics Division to enable it to construct a statistical data base.

7. A pan-African meeting of documentation, computer and information scientists was organized. A technical working group has met to study PADIS technical standards and theri compatibility with other systems. The reports of both meetings have been published and circulated in English and French.

8. Two national seminars were organized in Guinea and Zimbabwe on the role of information in national development in collaboration with the respective Governments. A training workshop was conducted, in collaboration with RIPS, on population information and documentation.

9. A total number of 13 trainees from eight African countries (Botswana, Congo, Gabon, Guinea, Ivory Coast, Liberia, Rwanda, Senegal) have been received to accustom them to the operations and management of modern information processing installations.

II. ESTABLISHMENT OF NATIONAL CENTRES

10. The CCC had submitted proposals to all African countries for the establishment of their respective national information and documentation centres (NIDCs). Favorable replies were received from several African countries, some of which have approached operation stages (e.g. Benin, Sudan) and others are at different stages of negotiation (Gabon, Guinea, Kenya, Nigeria, Zaire). In addition, the Governments of Algeria, Egypt, Morocco and Tunisia have designated their national centres as participating centres of the PADIS regional system.

11. At the time of the writing of this report, the establishment of the national information and documentation centres of the Republic of Benin and the Republic of the Sudan was being finalized, i.e. the national counterpart institutions identified, project documents signed, the physical facilities to house the centres provided and the equipments ordered. It is anticipated the centres will be operating by January 1984.

12. The 'Centre National de Documentation' of Morocco will shortly (before end of 1983) receive material assistance in terms of a disc drive and six interactive terminals to enable it to expand its national network.

13. If the NIDCs of Benin and the Sudan receive the full computer configuration as planned (fourth quarter, 1983), the installation and testing of equipment will be conducted during the last quarter of 1983.

14. A series of preparatory missions are planned (for late 1983) to negotiate the establishment of NIDCs in the countries that have responded favorably to the PADIS proposals as indicated in paragraph 10 above.

15. The identification of and negotiations with prospective donors to complement the resources being made available by PADIS and the Governments has been satisfactory. The United Nations Development Programme and the International Development Research Centre (IDRC) have made renewed committments to support the national components of the PADIS system.

III. ESTABLISHMENT OF SUB-REGIONAL CENTRES

16. As discussed in another paper, (document) the establishment of national centres has not been an easy taks mostly due to the considerable amount of initial investment NIDCs require and the reluctance of the majority of African countries to allocate scarce resources for this endeavour vis a vis other pressing priorities.

As a result, suitably organized subrregional information and documentation systems (SRIDS) were considered as valuable transitions. This is going to be possible by placing the expensive facilities of the centre (data processing equipment and higly skilled personnel) at the sub-regional centres and to enable a group of national centres benefit from these facilities.

17. With this in mind, consultative meetings were organized for the Eastern and Southern Africa, Northern Africa, Western Africa and Central African sub-regions between January and March 1983. The proposals presented by PADIS were endorsed by the sub-regional groupings except in Northern Africa where Member States felt to further investigate the proposed in view of their relatively more developed national information and documentation (I&D) infrastructures.

IV. ESTABLISHMENT OF INSTITUTIONAL PARTICIPATING CENTRES

18. PADIS had provided advisory assistance to the African Regional Centre for Science and Technology for the setting up of an information system on scientific and technological aspects. The design of the system has been finalized and the report of the exercise has been circulated to prospective donors for their consideration.

19. A similar exercise has been conducted for the design of a mineral resources data base in collaboration with the Eastern and Southern Africa Mineral Resources Development Centre and the ECA Mineral Unit. PADIS participated at a seminar sponsored by the former.

20. Advisory assistance for the design of similar systems has been initiated with the African Training and Research Centre in Administration for Development (Tangiers, Morocco), Pan-African Institute for Development (Yaounde, Cameroun) and the Organization Africaine pour la Proprite Intellectuel.

V. DATA TRANSMISSION NETWORK

21. A prefeasibility study has been conducted by PADIS, in cooperation with the European Space Agency to formulate guidelines for further work. The results of the study were presented to the Eight ECA Conference of Ministers held in Tripoli, Libya which directed the ECA Secretariat to further investigate the matter alongside other African programmes that foresee the use of modern telecommunication systems. Subsequently, the PADIS requirements were incorporated in the discussions for appropriate modern telecommunications infrastructures for Africa.

VI. CONCLUSIONS

22. Remarkable achievements have been made since the inauguration of PADIS in the establishment of the Central Coordination Office, the development of norms and standards for the processing of bibliographic information, the satisfactory execution of the referral information system in support of TCDC, and the publishing of indexes on development literature on Africa.

23. It can be surmised that, despite the slow progress made in the proliferation of information systems at the national level, the establishment of the two NIDCs in Benin and the Sudan confirm the viability of the PADIS programme and the seriousness of the approach being staged by the Central Coordination Office to accelerate their creation in other countries. The advantages the establishment sub-regional centres holds for the promotion of I&D activities at the national level has also been confirmed at the series of meetings held in early 1983.

2. WORK PROGRAMME (1984-1987)

I. THE ACTIVITIES OF THE CENTRAL COORDINATION OFFICE (CCO)

24. The Computerized Documentation Section of the CCO will continue to prepare quarterly issues of the DEVINDEX-AFRICA.

25. It is hoped that UNDP will continue to finance the second phase of the referral information system for TCDC when the preliminary phase expires in March, 1984. If so, the activities of the project will be expanded to include information on on-going research and development projects and African institutions that can serve TCDC purposes. This expansion of activities will require the study and design of data collection, processing and dissemination mechanisms in addition to the practical tasks of collecting relevant information, processing it and the publishing of directories. Resources permitting, one directory on each topic and yearly supplements to each directory will be issued. The preparation and publishing of the Directory of African Experts will be maintained.

26. It is expected the financing of the POPIN-Africa project will be secured before the end of 1983. PADIS will provide on the job training to the staff of the Project. It will provide access to the computer system and make available data base management and system analysis support through out the project life time.

27. It is expected the design of the Trade and Finance Information System will be finalized by December 1983 in collaboration with the Trade Division and its financing secured by June 1984. If so, PADIS will assist the Trade Division in executing the Project, in training project staff, providing computer facilities and by providing data base management and system analysis support.

28. The current collection of international data bases (LABORDOC, UNDIESA) will be expanded to include data bases on agriculture, education, energy, science and technology policy, etc. upon completion of negotiations that have been started with FAO and those that have yet to be concluded with UNESCO.

29. Effective June, 1984 SDI (Selective dissemination of information) and current awareness services will be provided on the international as well as the resident data bases on a regular basis.

30. The computerization of the ECA Library will be initiated in the first quarter of 1984. The purpose will be to diversify the sources of information and to gain experience in the automation of libraries.

31. A major promotional effort will be launched in cooperation with the ECA Statistics Division to increase the use of the statistical data base by African countries. The updating and expansion of the data base will continue using the PADIS computer system.

32. The Central Coordination Office will continue to collaborate with UNESCO and IDRC for the establishment of a regional, post graduate school of information science that will basically serve English speaking African countries. If and when established PADIS will make grants and fellowships available to staff of its participating centres. Individuals from French speaking countries will benefit from fellowships to the graduate school of information science in Rabat, Morocco, Five to eight fellowships will be available per annum.

33. A technical meeting of all PADIS participating centres at the national, sub-regional and institutional levels will be held during the last quarter of 1985 or the first quarter of 1986 to discuss and evaluate the impact of the PADIS programme.

34. A technical working group consisting of international authorities in the field will be convened during the second quarter of 1986 to evaluate the implementation of the PADIS programme.

35. Advisory assistance will continue to be provided for the design of new information systems or files along the lines of and under arrangements similar to the ones utilized for the execution of the POPIN-Africa network and the Trade and Finance Information System (See paragraphs 5 and 27). Prospective areas are human settlements, public administration and management, mineral resources, etc.

II. Towards the establishmenttof national centres

36. Intensive, on the job training will be provided to four senior staff of the NIDCs of the Republic of Benin and the Republic of the Sudan, respectively, on site or at the Central Coordination Office of PADIS. The trainees will be

the heads of the documentation, reprography and computer sections of the centres, and possibly, the directors of the centres. This activities will be conducted between January and June 1984.

37. Negotiations for the establishment of national centres, based on the favorable replies already received, will be conducted with the Governments of Gabon, Guinea, Kenya, Nigeria and Zaire during the first quarter of 1984. Provided the negotiations are successful, detailed planning for the establishment of two to three centres will be initiated in the second quarter of 1984 and their implementation during the first half of 1985.

38. During the course of 1984, further consultations will be made with the majority of the remaining African countries. It will be difficult to anticipate the outcomes of these consultations or the number of countries that will react favorably. Moreover, the establishment of sub-regional centres will affect both the rate of establishment of national centres and their degree of sophistication.

III. Towards the establishment of sub-regional centres

39. During the period 1984-1987 all four sub-regional centres servicing Eastern and Southern Africa, Central Africa, Western and Northern Africa will be established.

IV. Towards the establishment of institutional particiating centres

40. Current endeavours to establish information system under the aegis of specialized regional organizations will be maintained and expanded. Extensive collaboration is foreseen with the African Development Bank.

V. Data transmission network

41. Negotiations will be conducted with the Government of France, Union of Soviet Socialist Republics and the United States of America to acquire reserved channel capacities on existing communication satellites for the transmission of data between national, sub-regional and regional information and documentation centres and between African centres and those located in the industrialized countries as well as other developing regions.

C. PROJECTIONS UPTO 1989

42. It will be very ampitions to attempt to project the activities and work programme of PADIS upto 1989 in a detailed manner in view of the present extremely low level of development of information infrastructure in Africa. Moreover, the success in programme implementation during 1984-1985 in highly detrimental in setting up priorities for 1988-1989.

43. Therefore, it should suffice to say that during the period 1988-1989 the activities of PADIS in terms of user services, development of infrastructures at the national, sub-regional and regional levels and the establishment of an effective data transmission link will be vigorously expanded.

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THE ROLE OF INDIGENOUS SMALL-MEDIUM SCALE ENTERPRISES IN THE SOCIO-ECONOMIC TRANSFORMATION AND DEVELOPMENT IN AFRICA

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I. INTRODUCTION

1.1 Background

1 As part of the recommendations and decisions of the second session of the Joint Conference of African Planners, Statisticians and Demographers, which was held in Addis Ababa, in March 1982, the Conference requested the ECA secretariat to undertake a study on the role of Indigeneous Small and Medium Scale Enterprises (SMEs) in the Process of Socio-Economic Transformation and Development in Africa 1/. The study which has been carried out under Project No. 9.243.02, is submitted to this third Session of the Joint Conference in compliance with the directives of the second Session.

1.2. Nature and organization of the study

2. Initially, the study was intended to be an indepth field research on major aspects of development of these types of activities in Africa, supported by concrete case studies of selected African countries which would have provided evidence of actual problems encountered in the areas of organization, management, financing, technical assistance, the development of local entrepreneurships, etc. However, the lack of statistical information and financial resources to conduct on-the-spot country investigations has constrained the extent of the study. It is now a desk research paper aimed at highlighting the significance of the contributions of SMEs in the process of socio-economic transformation and development in Africa and to provide a set of policy measures and recommendations to be adopted by African governments which would create the requisite investment climate for the development of such enterprises.

3. The study is organized as follows: in section 2, the study deals with the rationale for the establishment of small-medium scale enterprises in Africa within the context of the African industrial development strategy and examines the employment generation effects and the role of such enterprises in the transformation and integration of the subsistence sector into the monetized economy. The characteristics, conceptual and definitional problems are reviewed in section 3 with the introduction of the "informal sector" as a vehicle for increased employment opportunities and the need to ensure its viability and steady growth. Section 4 gives general overview of the current status and level of development of small-medium scale enterprises, areas where such enterprises have a comparative advantage in terms of substantial contribution to value added of total output, and a brief survey of the major constraints impeding the development of SMEs in the African region. Finally, in section 5, a set of policy measures and recommendations is offered on the necessity of integrating

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1/ See "Report of the Second Session of the Joint Conference of African Planners, Statisticians and Demographers" - E/ECA/CM.9/22 - paras. 185 and 189.

programmes, strategies and policies for the development of SMEs into the national industrial development plans and vital areas of government assistance programmes such as the establishment of appropriate infrastructural facilities, financial assistance, choice and adaptation of appropriate technology and the development of a cadre of indigenous entrepreneurship.

Section 2. Rationale for the establishment of small-medium scale enterprises in Africa

2.1 Overview of Africa's industrial development strategy

4. In recent years, the ECA annual reviews of social and economic conditions in African countries, have revealed, among others, two major constraints in the development process in the Region, i.e. the slow growth of the industrial sector and the lag in the integrated development of rural areas where approximately 80 per cent of the population live. Africa is the least industrially developed of all developing regions and least physically integrated with lack of adequate structural patterns and factor inputs which are prerequisites for self-sustained industrialization. Indeed, Africa's share in world industrial production was around 0.6 per cent in 1975 as compared to 4.1 and 6.4 per cent for Asia and Latin America, respectively in the same year. In 1981, the average share of manufacturing in gross domestic product was only 9.6 per cent for a sample of 26 African countries. The average annual growth rate of manufacturing sector for developing Africa as a whole was approximately 4.6 per cent recorded during 1979-1981, which is far below the 8 per cent target of the third international development strategy.

5. The industrial sector in African countries is predominantly foreign controlled and in some cases a total absence of indigenous entrepreneurial participation in major economic activities. This dominance of foreign investment has resulted in the present structure of existing enterprises which are mainly foreign owned capital-intensive establishments, medium size assembly and processing plants of labour-intensive character but utilizing sophisticated technology, and other large scale operations, particularly in mining which are heavily dependent on external sources for raw materials and other intermediate inputs. On the other hand, commercial establishments of any significant size, in terms of relative contribution to the development process, are owned, controlled and managed by non-Africans. Also, as a result of investment incentive schemes in most African countries, a substantial number of medium-size light industries enterprises had developed during the 1970s substantially backed by foreign private investment.

6. Parallel to this industrial and commercial structure, economic activities in most African countries are made up essentially of very small productive units using rudimentary technology covering such areas as artisans and craft industries with predominantly manual operations and semi-skilled marginally employed producers of crude consumer goods. Other important activities are categorized under the "informal sector"

(ILO, 1972) which includes self-employed artisans, shoe-makers, vehicle repairs, petty traders, street hawkers, newspaper vendors, barbers, food kiosks, etc. 1/.

7. It is in this spectrum of industrial and commercial activities that small and medium scale enterprises are prevalent, the development and/or strengthening of which would play a decisive role in the overall economic growth and development of African countries.

8. The Lagos Plan of Action and the Final Act of Lagos laid down the basic framework for Africa's industrial development in the long-and medium-term which has been elaborated in a detailed programme for the industrial development decade for Africa and provides a set of guidelines for the formulation of strategies for major industrial subsectors and the modalities for the implementation of the decade programme. The Decade programme explicitly recognises that one of the fundamental requirements of the Lagos Plan of Action for achieving industrial development in Africa is that of "... creating a network of small- and medium-scale industries, as well as actually promoting and encouraging the informal sector" 2/.

9. The rationale for the creation of such a decentralized network of small- and medium scale enterprises in Africa is dependent on a combination of several socio-economic factors. It would have been appropriate to examine these factors in the context of a general developmental model favouring the SMEs, but the usefulness of such an approach is limited because of the differentiated economies and social structures and even more important, the heterogenous political orientation, of African countries. Nonetheless, a selected range of factors would suffice to demonstrate the rationale for the establishment of SMEs in Africa as recommended in the Industrial Development Decade Programme.

2.2 The role of SMEs in employment creation

10. One should start with the recognition that the average annual growth rate of population far exceeds the growth rate in GDP in most African countries. Because of the population pressure and the resultant growth in the active labour force, there is the need to devise strategies for the creation of productive employment opportunities. In contrast to the large scale operations in African countries (which are mainly outward looking enclave industries) small- and medium-size indegenous enterprises are usually labour intensive and as such they are an avenue for increased employment opportunities.

2/ Employment, incomes and equality: A strategy for increasing productive employment in Kenya (ILO, 1972).

3/ See "Programme for the Industrial Development Decade for Africa" prepared jointly by ECA, OAU and UNIDO - UN.ID/287 and "Lagos Plan of Action for the Economic Development of Africa, 1980-2000" - OAU.

11. To better appreciate the potential role of SMEs in the alleviation of Africa's employment problems, it is useful to view Africa's labour market in an analytical framework that distinguishes the following types of employment structures: (a) modern employment which includes labour employed in large-scale modern firms and organisations; (b) intermediate employment that includes labour in small-scale establishments, apprenticeships, and family workers in the formal sector (e.g. in registered shops); (c) the informal employment covering all self-employed and family workers in informal activities; (d) the unemployed doing no work with any type of compensation. Following this distinctions in the employment structures, it becomes immediately evident that a large bulge in the employment pyramid exists at the intermediate and informal employment level. Since majority of the economic activities of small-scale enterprises in Africa belong to this area it can be inferred that such enterprises could play a critical role in employing a bulk of Africa's active labour force.

12. Given the scarcity of employment data in general and those for small-scale and informal employment in particular, it is very difficult to illustrate the magnitude of labour absorption in the intermediate and informal sectors. However, two examples are given below in tables 1 and 2 to show the general importance of labour absorption by SMEs. Table 1 gives the share of employment by small-scale enterprises in manufacturing employment for Latin American countries grouped according to level of income. Table 2 gives the employment of small-scale enterprises for Zaire by industrial branch.

Table 1: Share of small-scale industry sector in employment, Latin America, 1960

	Share of SME in modern factory sector	Share of SME in total manufacturing
Group 1	26.3	16.6
Group 2	38.4	17.6
Group 3	50.1	12.7
All Latin America	31.5	16.4

Source: Small-scale Industry in Latin America.

Table 2. Distribution of permanently employed in small industries with volume sales less than 30,000 Zaires

Industry	Total employed	No. employed in SMEs	Share of SMEs
Food processing	17 [illegible]	[illegible]	5.6
Beverage and tobacco	[illegible]	113	[illegible]
Edible oils	[illegible]	706	3.4
Textiles	[illegible]	[illegible]	[illegible]
Clothing	[illegible]	[illegible]	[illegible]
Wood working	[illegible]	1 [illegible]	[illegible]
Furniture	[illegible]	[illegible]	[illegible]
Paper	[illegible]	[illegible]	[illegible]
Printing	[illegible]	[illegible]	[illegible]
Leather	[illegible]	[illegible]	0.7
Rubber	[illegible]	[illegible]	[illegible]
Chemicals	[illegible]	[illegible]	[illegible]
Petroleum	[illegible]	[illegible]	[illegible]
Non-metallic minerals	[illegible]	[illegible]	[illegible]
Metal products	[illegible]	[illegible]	[illegible]
Engineering works	[illegible]	[illegible]	[illegible]
Transport equipment	[illegible]	[illegible]	[illegible]
Others	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]

Source: Small-scale Industry of Zaire, vols. III and IV, EAIID April, 1975.

13. From Table 1 it can be seen that in Latin America small-scale enterprises absorb as much as 16.4 per cent of the entire industrial labour force as compared to 4.1 per cent for Zaire. Such a relatively low share of small-scale employment in total industrial employment for Zaire, which is exemplary of what exist in most African countries is an illustration of the low level of development of SMEs in Africa which could be a vital source for the creation of employment opportunities.

14. The development and country-wide dispersion of small and medium-scale enterprises could also contribute to (a) the equitable regional distribution of employment opportunities, and (b) the absorption of special categories of the population. The flexibility for small-scale enterprises to be located in many parts of a country creates an environment whereby employment opportunities can be widely spread within a country or a region including the rural areas. With respect to the absorption of special categories of the population, these enterprises could play an important role in the involvement of women and the handicapped in the development process.

2.3. Transformation and integration of the subsistence sector into the monetized economy

15. The inadequacies of the transport and communications infrastructural facilities, handicaps the distribution and marketing system in African countries and reinforces the dualistic characteristics of developing African economies i.e. - the monetized sector in which coexist, industry, mining, finance, insurance, trading and associated services and the 'subsistence' sector which is predominantly peasant agriculture, handicrafts and related activities. In most African countries farm-to-market roads are non-existent and most trunk roads are poorly developed, which makes the transportation of goods (urban-to-rural or vice versa) abnormally expensive. The location of small-medium size enterprises closer to the markets which they serve can increase the degree of monetization of the economy through organization of the distribution and marketing of goods and services, the creation of inter-linkage between the traditional agricultural areas and the industrial sector thereby enhancing the exploitation of economies of scale and optimum utilization of the development potentials of the African countries.

2.4. Increasing domestic production of basic goods and services

16. One of the fundamental objectives for the development of the small-medium-scale industries is to increase the local production of basic goods and services particularly those which are based on natural resources in abundant supply in African countries. The products of such enterprises could be channelled through wholesale traders and other distributors which will result in an expansion of the country's domestic trade. Such commercial interest will also induce the development of considerable indigenous expertise in marketing these products throughout the country.

2.5. Contribution to capital formation and savings for foreign exchange earnings

17. Another positive contribution of SMEs is that they are a potential source for increasing the level of savings and facilitation of domestic capital formation for increased investment activities. To encourage the development of small-scale enterprises in African countries would bring forth untapped and latent resources (capital, entrepreneurial and managerial talent, etc.) which would otherwise not be effectively available at all. These enterprises have little access to institutional financing and therefore rely heavily on personal savings and loans from relations. Such capital would never come into productive investment if the proper investment climate is not provided. In favourable economic conditions small entrepreneurs are inclined to save excess cash flow beyond the basic needs of their enterprises and families as evidenced by the spontaneous growth of informal savings clubs throughout Africa. Greater attention by policy-makers to encourage small-medium scale entrepreneurs to save excess returns could broaden the base for domestic resource mobilization which can be a vital source to finance small- and medium-scale enterprises.

18. Considered alongside with domestic productions, imports indicate an existing market and suggest opportunities for new industrial projects to satisfy a local demand. Most of the small and medium size enterprises are solely dependent on local sources for raw materials and other intermediate inputs, as opposed to large scale enterprises which import a bulk of their input requirements. The identification of potential areas of investment for small and medium scale enterprises can help in increasing import substitution possibilities and thus save the country's foreign exchange earnings which, otherwise, could have been spent for the import of the basic needs.

2.6 Development of indigenous technology

19. Another favourable argument for SMEs, is that technologies transferred from developed countries are not originally developed for the processing of local resources in the service of local needs in African countries and in many cases the appropriate indigeneous skills are not available for the adaptation of such technologies to local conditions. Besides, these technologies are expensive and constitute a major source of foreign exchange leakage from African countries. The development and/or strengthening of small- and medium-scale enterprises, therefore, would provoke the innovative abilities and ingenuity of local entrepreneurs to develop indigeneous technologies for the use of small-medium scale enterprises.

Section 3: Concepts, definition and characteristics of SMEs

3.1. General concepts and definition of SMEs. A brief review

20. A very delicate problem in economic research on small-medium scale enterprises in developing countries, and particularly so in Africa, is the basic conceptual difficulties that arises when one attempts at defining a small and/or medium size establishment. In Africa, the literature is not as vast as in the case of India or Japan, and a brief description or short systematic definition can do no justice to the great diversity that characterizes small-medium scale enterprises. The concept of SMEs varies according to the economic structure in general and the level of industrial development in particular, in individual African countries, because what may be seen as a small and/or medium size enterprise in Kenya, which is classified as an industrializing country with 22.1 per cent of value added in commodity production in 1976, could be a large scale operation in a non-industrializing country like Lesotho with a comparative 5.1 per cent of value added in commodity production in the same year 4/.

21. The very nature of the SMEs have made it difficult for systematic research to be conducted in order to throw light on the overall concept, characteristics, functions and responsiveness to changes in development policies.

4/ "Industrialization Indicators" - World Bank World Tables, 1976.

However, two favourable approaches have been devised over the years to alleviate the conceptual and definitional problems and these have increasingly found an in-road into the literature or country case studies on SMEs in few African countries.

22. One approach attempts at a functional definition by which SMEs are distinguished from large scale undertakings on the basis of suspected or proven characteristics. The main proponent of this concept is Eugene Staley 5/ who defines a small industry as that segment of manufacturing production which is carried out in relatively small establishments and this includes both factory and non-factory establishments. Non-factory establishments are household or cottage industries and workshop industry. As for the factory type, the distinction between small, medium or large is a matter of degree and it is here that Staley's functional characteristics become quite useful in the classification of enterprises in various sizes.

23. In this context, Staley points out that some of the suspected or proven functional characteristics of small scale enterprises should include: relatively little specialization in management, close personal contact of top management with production workers, customers, suppliers and owners; lack of access to capital through the Institutional Financing Systems, and difficulties to obtain short-term credit, no special bargaining strength in buying or selling, and a relatively close integration of the entrepreneur with the local community through local ownership and management and dependence on nearby markets and sources of supply. These characteristics are to a certain extent similar to those identified by the University of Ife in its research -programme on small scale industries in Nigeria.

24. In the case of medium scale enterprises, there is no particular characteristics that distinguishes such establishments from large scale operations except the level of capital investment, management structure and the size of the labour force, and the degree of utilization of power, all of which are dependent on the type of industry and the planned production capacities of such enterprises.

25. The other approach is to find some unobjectionable quantitative measure such as, employment; with or without the use of power; and capital equipment at some convenient valuation, etc.

3.2. Experiences of developing countries

26. In order to better illustrate the constraints and/or advancements in the application of both approaches in research programmes on small- and medium-scale enterprises in developing countries, we shall briefly examine below certain cases in the Asian, Latin American and African regions.

5/ Dr. Eugene Staley. "Small Industry Development (Research Programme on Small Industry Development - Miscellaneous Paper, No. 1 - December 1958.).

(a) Asia

27. With regards to the quantitative aspect of the definition of SMEs and some variant of the application of the functional approach in Asia, the experiences of India, which is classified as a newly industrializing country (NIC) and Japan, an industrialized market economy country of the OECD group, provide a useful guide in our analysis.

28. A glimpse at the Indian literature indicates that the concept and defnition of SMEs had gone through an extensive metamorphosis over the years. Between 1953-1960, the official Indian definition of a small scale establishment was those units with fewer than 50 employees, if motive power was used, or fewer than 100 if no motive power is used, with a fixed capital investment of 500,000 Rupees (approximately $US62,500). In 1960, the limitation on the number of employees was dropped and such enterprises were defined as those having 100,000 Rupees or less in initial capital investment and working as an auxilliary to large scale units producing components and parts on a sub-contractual basis. In 1966 the definition was found to be too restrictive and what was thought to be a more generic definition was adopted which considered small scale enterprises as comprising manufacturing units with a capital investment in plant and machinery not exceeding 750,000 Rupees 6/.

29. In Japan, the term small-medium enterprise is predominantly used and although there is no definite agreement on a standard definition amongst Japanese economists, it is generally used as an aggregate expression relative to the industry and the objectives of the researcher. However, a powstwar period definition of small-medium enterprise is an establishment employing less than or equal to 300 employees with capital outlay of 10 million Yen or less. In retail and wholesale business and service industries, the criterion of less than 30 employees prevails 7/. Moreover, a distinction is usually made between household industry,which is often referred to as petty business, and small-medium scale enterprises. A "petty business" is defined as a unit employing less than 10 persons in conjunction with the following attributes: strong characteristics of an individual enterprise; pre-modern management of business; inseparability of household and business; and high dependence on family labor.

(b) Latin America

30. Although there is no standard definition of what should be considered a small and/or medium-scale enterprise for countries in the Latin American Region, yet the basic criteria used by most of them consist of the level of employment, initial capital investment and to a certain extent, sales turnover 8/.

6/ "Small scale industries in India" - by the Development Commission, small-scale industries, New Delhi, 1967.

7/ H.Arizawa: On the controls of Japanese industry, 1937. Arizawa classified manufacturing factories as follows: (a) small factories (5 to 30 manual workers), (b) medium factories (30 to 100 manual workers), less factories (100-200 annual workers and larger factories (over 200 manual workers).

8/ See UNIDO: Small-Scale Industry in Latin America, New York, United Nations, 1969.

31. In Ecuador, small-scale enterprises are grouped under those types of activities in which the operation of the machines predominates over manual operations, and which are devoted to transforming raw materials or semi-finished goods into final and intermediate products. In conjunction with these characteristics, a small-scale enterprise is defined as an establishment whose initial capital investment, excluding land and buildings, is around 500,000 sucres (US$27,500); with employment in the range of 7-19 persons including administrative and sales staff; and a gross value of output of about 1 million sucres (US$55,000).

32. The Mexican definition of a small and/or medium size enterprise is an establishment whose capital is between 50,000 pesos (US$4,000) and 15 million pesos ($1.2 million).

33. The Ministry of Development in Venezuela defines a small-scale industry as an enterprise with an active capital of not more than 100,000 bolivas (US$22,727) and employing between 5 and 20 persons.

34. The above examples may not be representative of the Latin American Region, but a striking inference that could be drawn is that there is a marginal distinction between a small- and medium-scale enterprise in these countries.

(c) Africa

35. As has been pointed out earlier, the literature on small and/or medium scale enterprises in Africa, is not vast, nonetheless the few examples below is illustrative of the extent of the application of the two approaches in research programmes of certain international organizations and local institutions in few African countries.

36. In Nigeria, the Industrial Research Unit of the University of Ife 9/ defines a small-scale enterprise as one whose total assets in capital equipment, plant and working capital are less than N25,000 and employing fewer than 50 -fulltime workers with or without motive power. It may be a household, a cottage, a craft or a factory.

37. In Kenya, the operational definition of a small-scale enterprise are such industries with a total capital cost of less than KSH/ 5 million (approximately $380,000) 10/. Also, the concept of the informal sector has been extensively described and analysed in a case study by the International Labour Organization (ILO) in 1972, as an avenue for creating employment

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9/ Small-Scale Industries: Western State of Nigeria - by the Industrial Research Unit - Department of Economics, University of Ife, Nigeria, March, 1972.

10/ Small-Scale Industries and International Economic Co-operation: The Kenyan Experience - by R.M. Kaplinsky.

opportunities in Kenya. The study defines the informal sector to include self-employed artisans, shoe-makers, tailors, petty traders, street hawkers, newspaper vendors, caterers in [illegible] repairs and other maintenance workers etc.

38. In Peter Garlick's case study on [illegible] in Ghana, he concludes that the number of activities in the informal sector (as broadly defined above) constitutes the bulk of small-scale operations in urban and rural areas in particular, that majority of indigenous African business outside the agricultural sector are concentrated in what is called petty trade or "petty business" 11/

39. In the case of Ghana, a small-scale industry is defined as any unit whose control is within the capability of one people individually or collectively in terms of capital, material or know-how. This is a definition that is basic to the concept of self-reliance with a self-sustained internally located industrialization in African countries.

3.3 Proposed working definition of small or medium scale enterprises in Africa

40. On the basis of the above brief review of the conceptual and definitional problems of SMEs in developing countries including Africa, and in the context of the objectives of this paper, we shall attempt to offer a working definition of small [illegible] medium-scale enterprise suitable to what obtains in African countries. We shall use the functional definition (Eugene Staley, 1958) and the three dimensional quantifiable characters (employment, power and initial capital investment) in order to provide a framework for further research on SMEs in African countries.

41. In Africa, a small-scale enterprise can be defined as a unit employing up to 10 persons, with or without using motive power, with an initial capital investment of less than or equal to $10,000. Additionally, such units should possess all or some of these characteristics: the owner/proprietor supervising the financing, production, marketing and personnel of the enterprise; the entrepreneur finds it difficult to borrow short-term or long-term capital through organized financing institutions and so relies on relations, money lenders, personal savings or the profit of the enterprise; the enterprise is closely integrated with and meet only the immediate needs of the local community, having little knowledge and need of wider and distant markets; the establishment is generally weak, poorly equipped and reluctant to request or accept assistance for reasons of ignorance, prejudice or fear that information about the enterprise might reach the tax authorities or a nearby competitor; little or no account of business costs and revenue is kept, level of education of the proprietor is usually very low with a consequent low level of business management techniques, skills or market information.

11/ Peter G. Garlick: African Traders and Economic Growth - A Case Study in Ghana (In Gwyre [illegible] Schatz: Africa, South of the Sahara)

42. A medium size enterprise in Africa, can be defined as a modern manufacturing establishment (i.e. import substitute industries producing mainly durable and non-durable consumer goods) or a commercial entity (trading mainly in imported and/or locally produced manufactures). If it is a manufacturing unit, it could employ up to 250 employees, using active power with an initial capital outlay of up to US$ 500,000. With respect to commercial establishment, employment could be up to 50 people with capital investment of less than $US 100,000. These enterprises possess all or some of the characteristics of large scale enterprises in industrialized countries in terms of management functions (organizational structure, technology, specialization, etc. etc.)

Section 4 Small-and medium-scale enterprises in African industrial development

4.1. Overview of the role of small-scale enterprises in Africa's overall development

43. In view of the already identified significant potential contribution of small-medium scale enterprises to the overall development of African countries, it is surprising to note that ways in which governments can assist in their development have not been more intensively studied. However, as an eye opener, the programme for the industrial development decade for Africa stipulates that small and medium scale enterprises can contribute to: the generation of employment and income; the stemming of unwarranted rural-urban migration; the encouragement of using new, renewable and alternative sources of energy in rural areas; the generation of centres for the development of semi-skilled manpower; the development of the much needed indigenous entrepreneurial and industrial capabilities; the development of integrated and interlinked industrial development by increased subcontracting; the stimulation of growth of other sectors such as food and agro-based industries, building industries, transport and communications and energy; the establishment of broad-based development with the satisfaction of basic needs, more even income distribution patterns, fuller use of local resources and increased involvement of hitherto neglected parts of the broad masses, such as women.

44. The programme also identifies priority areas where small- and medium scale enterprises have a comparative advantage in the industrialization process of African countries:

(a) Food processing industries

45. In line with the first priority of the Lagos Plan of Action, the programme for the industrial development decade accords the highest priority to food processing industries. The essential strategy advocated by the programme is that food production, processing and marketing must be viewed as an integrated and interdependent system. In this respect it is rightly emphasised that the trend should be towards smaller-scale rather than

larger-scale processing units. Some specific areas include: (a) small bakeries, (b) small village-scale flour milling enterprises (c) small-scale dairy enterprises; (d) small-scale smoked and dried fish activities. If conscious efforts are made by governments to encourage and strengthen rural small-scale enterprises in such activities, it is obvious that African countries can benefit substantially in terms of increased value added, reduced food wastage and increased food production.

(b) Textile industries

46. Textile is one of the major basic needs and as such it is one of the four sectors in which the industrial development decade for Africa aims at achieving self-sufficiency by 1990. In terms of the possible role that small-scale enterprises can play in this sector it is envisaged that at least for those countries that have a domestic supply of raw cotton, there is a lot of potential for successful import substitution and even export promotion activities. This fact is clearly illustrated by the experience of Ethiopia where out of a total value added of ETB 108.9 million in 1978/79 by all small-scale handicraft co-operatives, as much as ETB 106.6 resulted from textile activities like tailoring, weaving and embroidery. In the West African countries where cloth-dyeing is widespread, value added by small-scale enterprises engaged in such activities is also quite significant. Similarly in the case of Mauritius out of a total of of 3,520 small enterprises (employing less than 10 workers) over 1 300 enterprises were involved in tailoring and weaving apparels.

(c) Forest-based industries

47. Wood-based products range from simple logs for firewood and charcoal to complex chemical products like viscose rayon fibres. Activities that could be undertaken by small-scale enterprises include: simple transformation of wood into products used for building; saw mills and wood-based panel mills; furniture; and small-scale charcoal production units. In some areas wood carvings have also been very important small-scale products especially for exports.

(d) Clay-based products

48. Perhaps one area in which the very important role of small-scale enterprises has not been fully appreciated in Africa relates to clay-based products. In this subsector one finds products that lend themselves easily and profitably to small-scale enterprises. For example brick making for rural development can be a very lucrative activity for rural small-scale entrepreneurs. Pottery and other ceramic products are other examples.

(e) Metallurgical industries

49. Although the metallurgical industry is usually seen as capital and technology-intensive, it has to be acknowledged that in many African countries,

small-scale enterprises have played a leading role in the manufacture and repair of basic metal products. In many countries the indigeneous agricultural implements, cooking stove and small parafin lamps, knives based on metal works are produced by the informal sector. Although the value-added by these enterprises is often evaluated as little, it is crucial to note their critical role is in the provision of basic implements for subsistence farmers and other basic necessities for the rural population.

4.2. The level of development of small-scale enterprises in Africa

50. The origins of small-scale enterprises in Africa particularly handicrafts and the informal activities, can be attributed to the cultural and economic environment of most African countries in the pre-colonical era. However, the proper formulation and organisation of programmes of small-scale enterprises is only a recent post-independence phenomenon. Thus, in making a thorough assessment of the present level of development of small-scale industries in African countries, it is imperative to assess: (a) to what extent the specific programmes have been effective in organising and developing the small-and medium-scale enterprises; (b) how much have SMEs developed in Africa in comparison to other developing regions and what actual contributions such enterprises have made to the development process in African countries.

(a) The organisational structure for mall-scale enterprises

51. The structure of programmes for small-scale enterprises in Africa varies from a small and isolated department in the Ministry of Industry and/or commerce to a large and integrated organ or office specifically for small scale enterprises. To illustrate the different organizational structures and the level of development these have brought about for small scale enterprises, a few country examples are outlined below:

(a.1.) Tanzania - The small industry development organisation (SIDO)

52. The Small Industry Development Organisation (SIDO) in Tanzania was a result of the reorganization in 1973 of the National Small Industry Corporation established in 1965. Since its inception SIDO has, inter alia, undertaken (a) an elaborate regionalisation of the extension system where extension work is undertaken at the regional level by Small Industries Promotion Officers (SIPOs); (b) the development of clusters of industries through the establishment of industrial estates, (c) a national census for small-scale industries, (d) the organisation of the handicraft sector through training and better marketing. SIDO has thus been able to organise artisans in Tanzania with the facilitation of the injection of capital into craft industry thereby alleviating the problems of under-capitalisation of the African artisans.

(a.2) Kenya - The Industrial and Commercial Development Corporation (ICDC)

53. In Kenya, the small- and medium-scale enterprises are assisted by the subsidiary of the Industrial and Commercial Development Corporation (ICDC) known as the Kenya Industrial Estates Ltd. (KIE). Its programme for small- and medium-scale enterprises was established as far back as 1966 and most of the industrial estates established, were in urban centres. Since emphasis had to be shifted to rural industrialization, a subsidiary of the KIE, the Rural Industrial Development Programme, was created to develop rural industrial development centres located in agricultural areas. These centres serve clients through business extension services although there has been tendency to concentrate on craft industries.

(a.3.) Zaire - Office for the Promotion of Zairean Small and Medium Enterprises (OPEZ) and (SOFIDE)

54. The "Office de promotion des petites et moyennes enterprises Zairoises" (OPEZ) was established in 1973 to promote the development of small scale enterprises. Although the terms of reference of OPEZ are very broad, most of its work have been confined to Kinshasa due to lack of funds and adequate professional staff. Its activities for small-scale enterprises had included a survey of these enterprises in Kinshasa and the provision of technical assistance. In addition to OPEZ, Zaire had established SOFIDE as the institution to provide loans to small-scale industries. In practice few loans have been made because prospective entrepreneurs lack suitable collateral and guarantee. In January, 1981 the Government had created an Inter-Ministerial Task Force with the participation of UNIDO, whose major responsibilities are to establish an appropriate definition of SMEs in Zaire, to identify major problems and to make pertinent policy recommendations in order to step up the government's assistance programme for the development of such enterprises.

(a.4) Cameroon - Sous-direction de l'artisanat de l'artisanat et des petites et moyennes entreprises

55. In Cameroon, programmes for small-scale enterprises are designed by the Department of Industry within the Ministry of Economy and Planning and integrated into the National Development Plan. The financing of small-scale enterprises is under the development Bank - la Banque Camerounaise de Developpement (BCD). Further, FOGAPE (Fonds d'aide et de garantie des Credits aux petites et moyennes enterprises) which is part of BCD, undertakes activities in common with commercial banks to assist small-scale enterprises in Cameroon.

(a.5) Botswana - Botswana Enterprises Development Unit (BEDU), Rural Industrial Office, EDF Factory Shells, etc.

56. In Africa, Botswana has perhaps the greatest number of units to develop industries in general and small- and medium-scale enterprises in particular. The Botswana Enterprises Development Unit (BEDU) has been the principal government institution to assist small- and medium-scale enterprises. From its inception BEDU's emphasis was on the establishment of Industrial Estates in major urban areas.

Within six years of its existence around 70 small and medium scale enterprises were established and there has been a refocus on industries located in rural areas through rural industrial extension work. Besides BIDU, other local organisations that provide assistance to small-scale enterprises include: the Rural Industrial Office (RIO), the EDF factory shells, Brigades Development Trust, Rural Industries Innovation Centre, the Botswana Technology Centre, the National Development Bank, etc. Although all these institutions have contributed to the development of SMEs in Botswana there is a need for co-ordination to avoid conflicting policies and interests so that the small and medium scale enterprises can derive maximum benefits from the Government's assistance programme and tighter control over the enterprises to ensure their viability.

(a.6) Mauritius - Small-Scale Industries Unit

57. Prior to 1975, the Government of Mauritius had given the responsibility of promoting and developing small scale industries to the Ministry of Education and Cultural Affairs. In early 1975 this responsibility was transferred to the Ministry of Commerce and Industry where a Small Scale Industries Unit was created with one local economist and two experts. The Unit provides technical, management and economic guidance and assistance to existing and prospective small and medium scale enterprises in collaboration with the Rural Development Unit. About 10 enterprises have benefited from the Government's assistance programme which includes the purchase of machinery and equipment from a loan of 2 million Mauritian Rupees. The Government plans to establish an industrial estate in order to provide better facilities as an incentive to small and medium scale enterprises.

58. The general picture that can be drawn from the above examples is that during the 1970s a number of African Governments had designed programmes for assisting small- and medium-scale enterprises and these have had a certain impact on industrial development in general. However, one feature that needs to be emphasised is the lack of spread effects at the national level due to a high concentration of the enterprises in urban centres to the neglect of the rural areas. As a result many of the programmes for small and medium-scale enterprises in Africa have had little impact in infusing the benefits of industrial development in the rural areas where majority of the population live.

(b) The Development of African SMEs Relative to other Regions

59. In spite of the numerous problems encountered in a comparative analysis of the level of development of small-scale enterprises among developing regions or even among countries of the same region (i.e. definitional, scarcity and accuracy of data, interpretation of parameters such as 'value added', etc.), an attempt has been made in the table below to present some comparative shares of the non-modern industrial subsector in the value added of selected developing countries during the mid-1970s.

60. As can be seen from the table, [illegible] African countries contribute a substantial proportion to total value added of the manufacturing sector as compared to countries in other developing regions. However, care must be taken in interpreting the data because the rankings does not correspond closely to the level of development of these enterprises. A clear feature of the findings is that the more industrialized African countries in the sample have a lower value added by small and medium-scale enterprises which indicates a bias towards large scale establishments as opposed to small-medium scale enterprises in the industrialization strategies of African countries.

Table 3: Ranked share of the top eleven countries in manufacturing value added of selected developing countries

Country	Rank	Year	Share in VA	Threshold size of establishment
Botswana	1	1973	41.4	less than 10
Indonesia	2	1975	37.7	less than 5
Ecuador	3	1975	36.6	less than 7
Iraq	4	1975	28.0	less than 10
Venezuela	5	1974	26.2	less than 5
Bangladesh	6	1975	17.0	less than 10
Tanzania	7	1974	14.4	less than 10
India	8	1974	12.7	less than 10
Philippines	9	1974	12.0	less than 50
Ethiopia	10	1974	10.1	less than 10
Kenya	11	1975	10.0	less than 50
Honduras	12	1971	9.5	less than 5
Tunisia	13	1975	9.3	less than 50
Colombia	14	1975	9.1	less than 10
Turkey	15	1975	10.3	less than 10

Source: "World Industry Since 1960: Progress and Prospects," UN, ID/CONF.3/2 (ID/229).

4.3 Actual contribution of SSIs

(a) Contribution to manufacturing value added

61. The table below [illegible] estimated relative share of small-medium scale enterprises in the total manufacturing value added and in GDP for selected African countries. It can be seen that small- and medium-scale enterprises contribute significantly to the total value added in the manufacturing sector. Out of a sample of 14 countries 4 countries have more value added by small scale enterprises than large-scale industries. Another 4 countries have a share of value added by small- and medium-scale enterprises ranging from 20-50 per cent. Given the fact that the share of manufacturing in total GDP is low for Africa as a whole it is noteworthy that in some countries small

and medium-scale enterprises contribute as much as about 8 per cent to total GDP.

Table 4: Percentage contribution of SMEs in manufacturing and GDP

	Year	Share of MVA in GDP	Share of SMEs in MVA	Share of SMEs in GDP
Central African Republic	1976	12.60	55.9	7.04
Egypt	1976	19.04	35.3	6.72
Ethiopia	1979	10.06	20.3	2.04
Gambia	1978	3.70	52.0	1.92
Ghana	1972	9.62	8.0	0.77
Ivory Coast	1976	13.17	8.9	1.17
Kenya	1980	16.82	16.5	2.78
Madagascar	1976	12.30	47.4	5.83
Malawi	1975	16.56	50.4	8.35
Mauritius	1980	20.25	30.6	6.20
Nigeria	1976	9.43	51.2	4.78
Rwanda	1979	12.34	21.6	2.69
Libya	1976	3.66	37.6	1.38
Somalia	1977	8.30	35.4	2.69
Swaziland	1979	19.11	11.6	2.23
Tunisia	1976	11.90	5.0	0.60

Source: Statistics Division, ECA secretariat

(t) Contribution to manufacturing employment

62. To demonstrate the capacity of SMEs in absorbing a sizable proportion of the active labour force in the manufacturing sector, the table below gives the distribution of employment among small and medium-scale enterprises and large scale industries in selected African countries for the period 1972-1979. As the figures indicate, small and medium scale enterises accounted for an average share of 43 per cent and 63 per cent of manufacturing employment in Egypt and Libya, respectively. Much more striking is that out of 7 countries in the sample, four (Egypt, Kenya, Malawi, Libya) registered average annual growth rate in employment by small and medium-scale enterprises higher than large scale establishments.

Table 5: Distribution of employment in manufacturing in selected African countries (in thousands)

	1972		1973		1974		1975		1976		1977		1978		Average annual growth
	Empl.	%	Empl.	%	Empl	%	Empl.	%	Empl.	%	Empl.	%	Empl.	%	
Egypt															
Large scale industries	671.3	58	694.5	57	711.9	52	737.5	57	760.2		789.1	58	819.1	57	3.8
Small-medium scale ent.	463.3	42	520.5	43	648.3	48	564.4	43	...		569.0	42	612.1	43	4.7
Total manufacturing	1114.6	100	1215.0	100	1360.2	100	301.9	100	...		1358.1	100	1431.2	100	4.3
Ethiopia															
Large-scale industries	53.5	73	55.0	73	57.5	74	60.1	74	59.4	75	62.8	78	66.1	82	3.5
Small-medium scale ent.	20.3	27	20.3	27	20.7	26	21.2	26	20.0	25	18.0	22	15.0	18	-4.5
Total manufacturing	73.8	100	75.3	100	78.2	100	81.3	100	79.4	100	80.8	100	81.1	100	1.6
Kenya															
Large scale industries	94.0	90	95.5	88	96.0	86	97.8	88	110.4	92	123.0	91	122.1	89	4.5
Small-medium scale ent.	10.0	10	13.0	12	15.3	14	129	12	10.0	8	12.9	9	15.0	11	7.0
Total manufacturing	104.0	100	108.5	100	111.3	100	110.7	100	120.4	100	135.9	100	137.1	100	4.7
Malawi															
Large scale industries	23.8	86	25.7	87	25.9	84	28.0	79	27.0	75	30.7	78	32.2	80	5.2
Small-medium scale ent.	4.0	14	4.0	13	4.9	16	7.4	21	9.0	25	8.8	22	8.0	20	12.2
Total manufacturing	27.8	100	29.7	100	30.8	100	35.4	100	36.0	100	39.5	100	40.2	100	6.3
Lybia															
Large scale industries	8.8	38	9.0	35	10.7	36	12.6	38	14.1	37	15.7	38	17.6	37	12.2
Small-medium scale ent.	14.3	62	17.1	65	18.7	64	20.5	62	23.6	63	26.2	62	30.1	63	13.2
Total manufacturing	23.1	100	26.1	100	29.4	100	33.1	10	37.7	100	41.9	100	47.7	100	12.8
Swaziland															
Large scale industries	6.0	80	6.5	77	6.9	81	7.4	74	7.8	85	8.2	87	8.2	85	2.3
Small-medium-scale ent.	1.5	20	1.9	23	1.6	19	2.6	26	1.4	15	1.2	13	1.5	15	0.0
Total manufacturing	7.5	100	8.4	100	8.5	100	10.0	100	9.2	100	9.4	100	9.7	100	4.4
Zimbabwe															
Large scale industries	132.5	92	137.7	92	147.9	92	151.7	91	146.9	90	141.2	91	138.7	93	0.3
Small-medium-scale ent.	12.0	8	11.7	8	13.4	8	14.3	9	16.7	10	13.9	9	10.6	7	-2.1
Total manufacturing	144.5	100	149.4	100	161.3	100	166.0	100	163.6	100	155.1	100	149.3	100	0.5

Source: ECA secretariat, Statistics Division.

4.4 Major constraints to the development of small-scale enterprises in Africa

(a) Economic constraints

63. The development of small-and medium-scale enterprises in Africa have been indirectly but greatly constrained by development policies which had centred around the production of primary commodities for export and establishment of import substitution industries. Most development plans of African countries did not attribute any significant role to small-scale enterprises. Many fiscal, customs and financial measures - especially investment incentives - set minimum levels of initial capital requirement far in excess of the level affordable by the indigenous entrepreneurs. Many of the indigenous small- and medium-scale enterprises that badly needed government assistance were disadvantaged by investment policies which benefitted mainly foreign large industrial and commercial enterprises. This perception of development had been a deterant in the overall development process and in particular, the development of indigenous entrepreneurship and the increased processing of local raw-materials to satisfy domestic requirements.

64. An important external constraint is the market structure in most of the African countries which are characterised by a generally low purchasing power of the population, the high competition with a wide range of imported products and the difficulties of marketing the products of small-scale enterprises. Further, the complexity of market conditions and sales outlets increases the dependence of small scale enterprises on intermediaries for distribution of their products, which reduces the incomes of such enterprises.

65. There is also the problem of the shortage of foreign exchange resources. Generally, most African Governments allocate foreign exchange to large scale projects as opposed to small enterprises. This results in major problems for those small entrepreneurs who require such resources to purchase machinery and equipment and raw material inputs from outside sources. In conjunction with this aspect, there is the absence of strong associations of small entrepreneurs which could enhance their bargaining power to acquire either a sizeable share of available financial resources or enter into joint arrangements for the procurement of raw materials, and also enable them to influence economic policies in their favour, etc.

66. Another obstacle to the progress of small-scale enterprises can be attributed to factors such as internal management and production techniques. Most small entrepreneurs learn the skills of management from the day-to-day operations of their establishments but such an approach is insufficient for the handling of the basic economic, administrative and technical aspects of the management role. With regards to production the manufacturing process is often times modelled on traditional methods and alternative techniques appropriate to the needs of the enterprise are rarely adopted because of lack of financial resources, skills or even the knowledge about the existence of such a technique.

67. The other noticeable constraints which hinder the development of SMEs in Africa include:

- the difficulties of obtaining bank loans because of the high risk associated with such enterprises and the administrative cost to the banks in administering such small loans;

- difficulties to get access to markets and raw materials;

- low pricing policies adopted by African governments encroaches on the the profitability of SMEs;

- inadequate transport and communications facilities

- the lack of appropriate industrial policies for SMEs; etc., etc.

(b) Other non-economic constraints

68. There are also non-economic constraints (i.e Psycho-social and institutional factors) which impede the development and viability of small and medium-scale enterprises. These include:

- the extended family which erodes the possibility of increasing the reinvestible capital which usually goes to support non-productive members of the household;

- the 'demonstration effect' which direct the consumer preference for imported commodities as opposed to the local products of SMEs thereby constricting the market possibilities.

- the lack of co-ordination between government agencies providing assistance in favour of SMEs.

Section 5: Policy measures and recommendations: the role of African Governments in the development of small, medium-scale enterprises

5.1 Integrating SMEs into industrial development plans

69. In most developing African countries, plans and programmes do not internally consider the specific problems of small- medium-scale and rural industries. Most African countries have formulated investment codes offering incentives for the establishment of large scale industrial projects to the detriment of small-scale indigenous industries. A sound industrial development strategy is one that promotes complementarity between large and small industries; that stimulates growth and diversification of industry and accelerates indigenization by easing the transition towards advanced technologies and effective methods of management. Small-medium scale indigenous enterprises need to receive priority attention in the development plans of African countries because of its growth potential, linkage effects and employment generation. Thus, a firm declaration of policy in favour of small-medium-scale business development within the over-all development plan of African Government would be strongly recommended.

5.2 Government sponsored assistance programmes

70. There is a need for well-planned assistance programmes by the African Governments and for co-ordination of the various government services that are offered to small-medium-scale enterprises, particularly in the following areas:

(a) The establishment of industrial estates

71. Several African Governments have already recognized the prime importance of the creation of industrial estates in promoting the development of small-medium-scale enterprises in their respective countries. The location of enterprises within an industrial estate makes it possible to provide them with a number of common services, such as: (1) standard buildings; (2) an advisory bureau which can assist them in choosing equipment, plant layout, selection of raw materials (sources of supply, prices, quality, etc.), (3) maintenance services (mechanical, electrical, etc.) thus avoiding investments which are sometimes costly and difficult to depreciate; (4) other services or supplies (testing and quality control laboratory, water softening, steam supply) thus reducing certain investment which, in many cases, could render unprofitable certain small-scale enterprises which require such utilities in selective small quantitities; (5) energy at the best possible price since the estate would have a sufficiently large capacity to benefit from the best rates (decreasing in proportion to consumption), and (6) social services including possibly literacy centres, etc.

72. In addition to these services, the industrial estates could help establish vocational training centres which enable entrepreneurs to have a sort of nursery of skilled manpower at their disposal. It would also be desirable to set up training institutes or centres on these estates to assist with the establishment of different workshops which will play a dual role in production and training fields. Apart from having the advantage of reducing certain direct and indirect production costs, industrial estates will also help in promoting the decentralization of industries in areas far removed from the large urban centres and in particular from the major cities.

73. It should be noted, however, that the establishment of industrial estates and commercial centres must be preceded by a very thorough preparation of a study of their profitability 12/. The study would include an estimate of investment costs and operating income accruing - rent of industrial premises, taxes paid to the State and other indirect profits, wages paid to workers, etc.

(b) Provision of other government support services

74. Often government give incentives to local industries to protect them from competition from foreign firms. Small-medium-scale enterprises should also be given special incentives so that they can compete with both

12/ See UNIDO, the Effectiveness of Industrial Estates in Developing Countries, United Nations, New York, 1978.

foreign firms and local large industries. Government incentives however, must aim at helping the small firms to become more self reliant and independent in the long run, and should avoid making them overdependent on assistance so that incentives eventually become a form of subsidy. It is, therefore, advisable to make incentive temporary rather than permanent. Among the various types of incentives offered to small-scale enterprises are tax holidays, exemption on import duties, conversion of tax into long-term interest free loans and tariff protection.

75. Small-medium-scale enterprises often import raw materials as well as machinery and equipment for the production of their products. This process of importing is time consuming and the procedures involved can be so tedious and complicated that small-medium-scale enterprises with limited financial and manpower resources often find it difficult to cope with these activities. In addition, small-medium scale enterprises often lack expertise in marketing their products. The Government could, therefore, assist them either by actually buying and selling their products on their behalf or by creating a favourable environment to enable them to do the selling themselves. This strategy involves providing training, guidance, advice and assistance, in import export promotion and marketing. It is thus desirable to set up a government agency with the aim to assist small-medium-scale business in dealing with their specific problems and to co-ordinate their activities with the various government departments.

5.3 Infrastructure support services

(a) Infrastructural facilities

76. Industrial development of any developing country depends not only on direct government programmes such as those enumerated above, but also on supporting services which create the environment necessary for any meaningful industrial activity. The creation of infrastructure should be looked upon as an input necessary for the industrial activity on any reasonable scale. This includes services like transport, power generation and distribution arrangements, communications such as telephones and efficient mail services, banks, storage and warehousing facilities.

(b) Extension services and training centres

77. The managers or owners of the small or medium-scale enterprises often lack experience and education in their respective fields of endeavour and this results, in many instances, in ill-designed and unprofitable ventures. The overall objectives of an extension service is to enable business people to improve their managerial, technical and vocational skills, and to help them analyse their problems themselves and thus develop methods of solving them. The extension officers should be able to identify sources of finance and raw materials as well as market opportunities for the particular commodities, maintain regular contacts with other agencies (like banks) which provide technical and financial assistance to small business.

(c) Other supportive infrastructural services

78. [illegible] small-medium-scale entrepreneurs run into difficulties [illegible] find solutions to their problems partly because they may not be aware of the assistance and services which are available to them. Hence some sort of information centres should be established to collect and disseminate information of interest to small-medium-scale enterprises. The types of information must include [illegible] government policy, rules and regulations concerning small businesses, training programmes offered by various institutions, alternative technology and production processes available locally and export market information, supply of machinery and raw materials, statistics information and government documentation requirements.

5.4 Financial assistance

(a) Domestic financial institutions

79. As was stated above, small-medium-scale enterprises are practically unable to secure funds from commercial financial institutions. Governments can assist in providing subsidized credit through specialized financial intermediary institutions for channelling financial assistance to small-medium-scale enterprises. The practice in Africa is to establish development finance companies, usually with equity shares held by the main intermediary. Also development banks can effectively [illegible] to give loans to small-scale enterprises. African governments can also take up [illegible] of commercial banks to provide technical assistance, but also as the financier of small scale business activities. However experience reveals that such financial channels face many difficulties in both preparing projects and appraising them realistically. Some technical assistance should be given to them on how to carry out their roles of adhering to stringent procedures for loan approval and supervision.

(i) Foreign financial support

80. Since foreign governments and international institutions have manifested interest in providing funds on a bilateral and multilateral basis, for the financing of small-medium-scale business enterprises in Africa. The World Bank loans for small enterprises in Sub-Saharan Africa during the period 1975-1983 amounted to US$51.0 million to 11 countries (Burundi, Cameroon, Comoros, Ethiopia, Gambia, Ivory Coast, Kenya, Lesotho, Madagascar, Mauritius and Niger) 13/. These loans are exclusively designed to support small enterprises. In most cases loans are provided to the development finance institutions which would channel them to small-medium-scale enterprises in their respective countries. The size of these loans range from US$300,000 in Lesotho to US$2,000,000 in Mauritius. The World Bank has also provided industrial credits to the tune of US$15.3 million to Burundi, 13 million to Rwanda, 9.3 million loan to the Development Bank of

13/ Jacob Levitsky "World Banks Lending to Small Enterprises in Sub-Saharan Africa", Washington D.C., June 21-24, 1983.

Comoros; part of which will help finance small-medium-scale enterprises in these countries. For the immediate future, small-medium-scale projects are in advanced stages of preparation for Tanzania ($10 million) and Nigeria ($40 million - $36 million credit line and $4 million for training) and a loan of $12 million to Botswana most of which is for financing small-medium-scale enterprises. The Indian Government is also interested in financing SMEs in Africa on a bilateral basis. African Governments should ensure that such external assistance obtained on a bilateral and multilateral basis be used for the development and promotion of small- and medium-scale enterprises in their respective countries.

5.5 Choice and adaptation of appropriate technology

(a) Definition and advantages of appropriate technology

81. It has long been recognized that the choice of technology and technical change plays a vital role in contributing to the economic development of all nations besides the increase in the supply of resources and improved efficiency in their use 14/. However, the choice of options between intermediate, traditional technology and advanced technology is not clear cut and is not necessarily mutually exclusive. Intermediate technology may be the answer in some small-medium-scale industrial undertakings while advanced technology may have to be used elsewhere. The best mix of the two options has been termed "Appropriate Technology" which is defined as technology that is appropriate to a country's factors of production in that it maximises the use of those factors which are locally plentiful like labour and raw materials in developing countries - while minimizing the use of those which are locally scarce, such as capital and skilled management 15/. Such technologies utilise local and thus accessible raw materials thereby avoiding imports which consume scarce foreign exchanges and employing more labour per unit of scarce investment capital. Developing African countries should therefore choose appropriate technologies, and should only opt for sophisticated technology after a careful and thorough study of alternatives indicates that the latter is appropriate in special circumstances.

(b) Africa's technological capacity

82. As can be seen from the table below Africa is the least technologically developed continent in the world today. The ratio of total stock of scientists and engineers represents about 2.8 per cent and the number of technicians accounts for 3.4 per cent. The number of scientists and engineers engaged effectively in the development and research of technology account for only 2.6 per cent in the world and 12.7 per cent in the developing world total, while the number of technological technicians account for 3.7 per cent and 2 per cent respectively.

14/ A.K.N. Reddy, Technology, Development and the Environment: A Re-appraisal, Un Environment Programme (UNEP), Kenya, 1979.

15/ See Malcolm Harper/Tan. Thiam Soon, Small Enterprises in Developing Countries Case Studies and Conclusions, Intermediate Technology Publications, Ltd., London, 1979.

Table 4: Technological capacity - selected indicators
(averages expressed as medians for 1970 or latest year available)

Science and Technology	Developed market economy countries	Developing countries and territories		
		Africa	Asia	Latin America
Ratio of total stock of scientists and engineers per 10,000 population	112.00	5.80	22.00	69.00
Ratio of technicians per 10,000 population	142.30	8.30	23.40	72.20
Scientists and engineers engaged in R & D per 10,000 population	10.40	0.35	1.60	1.15
Technicians engaged in R&D per 10,000 population	8.20	0.40	0.60	1.40

Source: UNIDO, 1979.

(c) Establishment of technology development centres

83. For a developing African country to introduce and adapt appropriate technology and to achieve rapid industrialization, it is suggested that a technology development centre should be established. Such a centre can be charged with the responsibility of upgrading traditional methods of production, scaling down and redesigning high-cost technology, designing new products, adapting appropriate technology and training of entrepreneurs. To encourage the adaptation and to effect the transfer of technology, it is suggested that (1) foreign machinery and processes should be introduced only after careful and thorough study of the alternatives available; (2) substitution of imported equipment and components by locally made indigenous machines should take place gradually as the technological base of the country expands; (3) innovators and investors should be encouraged to develop and/or adapt appropriate technologies by providing incentives, such as subsidies, income tax rebates, or tax holidays etc.; (4) the use of appropriate technology should be promoted through open-house discussions, industrial clinics and training courses.

5.6 Development of entrepreneurship

84. Entrepreneurial ability is essential to any industrial development process; but entrepreneurial skills are difficult to define and do not necessarily lend themselves to formal education. Some entrepreneurial ability is inherently innate to particular individuals, which can be stimulated in certain circumstances and encouraged by the creation of favourable conditions. In Africa in particular, the entry of Africans into trade and commerce as well as in small-medium-scale

manufacturing enterprises is apparently slow due to the lack of profitable opportunities for investment, lack of sufficient capital and the lack of knowledge and training in business practices 16/. However, individuals with entrepreneurial ability can be taught management skills. Training institutes should provide structured training opportunities for entrepreneurs in combination with the services of well trained extension workers. Such training opportunities and extension services, ideally should be designed to incorporate advice on such aspects as business finance structure, personnel policies, industrial relations, marketing, technology and procurement. There is also a need to develop a class of new young entrepreneurs from among technical graduates and others employed in industry and business and to encourage them financially and technically to set up their own industrial ventures.

85. It is therefore recommended that African Governments should provide the necessary investment climate, training facilities and other technical services to encourage the development of indigenous entrepreneurship that is capable of identifying investment opportunities in areas where small- and medium-scale enterprises are the best options in the industrialization process of African countries.

16/See Peter Marris and Anthony Somerset African Businessmen, Nairobi, East African Publishing House, 1977.